## **CLAIMS**

## What is claimed is:

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A method for calculating an employee's compensation, comprising, in a processor:

associating sets of attributes with pay categories;

splitting the employee's shifts into sub-shifts, responsive to work

parameters; and

for each sub-shift,

determining a set of attributes for the sub-shift,

determining a pay caregory with which the set of attributes is

associated,

assigning the pay kategory to the sub-shift, and

determining compensation for the employee for the sub-shift,

responsive to the assigned pay category.

The method of Claim 1, wherein each set of attributes is a unique combination of attributes.

3. The method of Claim 1 wherein work parameters comprise at least one of workplace rules, scheduled time, holiday calendars, dates and times of the shift.

4. The method of Claim 1 wherein a subshift comprises one or more contiguous intervals having common attributes.

5. The method of Claim 1/, wherein:

associating sets of attributes to pay categories comprises creating a

mapping which maps each set of attributes to at least one pay category; and

determining the at least one pay category with which the set of attributes

25 is associated is responsive to the mapping.

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- 6. The method of Claim 5 wherein the mapping is configurable by a user.
- 7. The method of Claim 1 further comprising:

determining a total compensation for an employee for a pay period by adding the amounts determined for each subshift of the pay period.

The method of Claim 1, wherein a compensation qualifier is associated with each pay category, wherein determining compensation for the employee for the sub-shift responsive to the assigned pay category, is responsive to the employee's base pay and the compensation qualifier.

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- The method of Claim 8, wherein plural compensation qualifiers are associated with a pay category, each compensation qualifier being in effect for a different time of day.
- 10. The method of Claim 8, wherein the compensation qualifier comprises a pay multiplier, such that determining compensation for the employee for the subshift comprises multiplying the employee's base pay by the pay multiplier.
- 15 11. The method of Claim 8, wherein the compensation qualifier comprises a pay adder, such that determining compensation for the employee for the sub-shift comprises adding the pay adder to the employee's base pay.

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The method of Claim 11, wherein the compensation qualifier additionally comprises a pay multiplier, such that determining compensation for the employee for the sub-shift comprises multiplying the employee's base pay by the pay multiplier.

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The method of Claim 8, wherein the compensation qualifier comprises a bonus time, such that determining compensation for the employee for the sub-shift comprises awarding the employee the bonus time.

- 14. The method of Claim 13, wherein the bonus is added only if a specified minimum time requirement is met.
- 15. The method of Claim 13, wherein the bonus time is a specified amount of bonus time.
- 5 16. The method of Claim 13, wherein the bonus time is a specified percentage of time worked during a specified interval.
  - 17 The method of Claim 1, further comprising: setting a threshold for a first pay category;

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defining an overflow pay category; and

calculating, for a given period, a total time awarded to the first pay

category; and

if the total time awarded to the first pay category exceeds the threshold, transferring the excess awarded time to the overflow pay category.

18. The method of Claim 17, further comprising:

the period is/one day.

- 19. The method of Claim 17, further comprising: the period is one week.
- 20. The method of Claim 1, wherein an employee's actual compensation is calculated based on actual attendance and applicable compensation rules.
- 20 21. The method of Claim 20, wherein actual attendance is determined from collected punch information.
  - 22. The method of Claim 21, wherein punch information is collected by a reader through which encoded cards are swiped.

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- 23. The method of Claim 21 wherein punch information is collected by a biometrics device.
- 24. The method of Claim 21 where n punch information is stored in a database.
- 25. The method of Claim 21 wherein punch information comprises any or all of IN / OUT information, timestamps, and break indications.
- 26. The method of Claim 1, wherein an employee's budgeted compensation is calculated based on the employee's assignment schedule.
- 27. The method of Claim 1, wherein an employee's forecasted compensation is calculated based on the employee's actual attendance for a selected period, and the employee's assignment schedule.
- 28. The method of Claim 1, wherein determining compensation for the employee for the sub-shift is responsive to a pay policy.
- 29. The method of Claim 1, further comprising:

forming a completed shift, responsive to identified transactions and the employee's schedule.

- 30. The method of Claim 29 wherein transactions comprise in punches and out punches.
- 31. The method of Claim 1, wherein each sub-shift is classified as to which attributes are in effect.
- The method of Claim 31, wherein attributes comprise any or all of premiums, special pay, overtime, schedule deviation, holidays, and specially designated days.

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A method for calculating an employee's compensation for a pay period, comprising, in a data processor:

associating sets of parameters with pay categories obtaining the employee's punch information; determining time segments responsive to the punch information;

for each time segment,

determining a set of valid parameters according to a set of rules, determining a pay category associated with the set of valid

parameters, and

responsive to the pay category; and

determining the employee's compensation for the pay period responsive to the calculated compensations determined for time segments within the pay period.

15 34. A time and attendance system, comprising:

a database for storing punch data;

a calculation engine for calculating an employee's compensation responsive to the stored punch data, the calculation engine comprising

means for determining subshifts, responsive to the stored punch data and to work parameters,

means for associating at least one attribute with each subshift a mapping which maps each of a plurality of unique sets of attributes to at least one pay category, such that a particular subshift can be associated, through the mapping and responsive to the set of attributes with which the particular subshift is associated, with the respective at least one pay category to which the set of attributes is mapped, and means for determining compensation for a subshift responsive to

the respective at least one pay category.

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35. A computer program product for calculating an employee's compensation, the computer program product comprising a computer usable medium having computer readable code thereon, including program code which:

associates sets of attributes with pay categories;

splits the employee's shifts into sub-shifts, responsive to work parameters; and

for each sub-shift,

associated,

determines a set of attributes for the sub-shift, determines a pay category with which the set of attributes is

assigns the pay category to the sub-shift, and determines compensation for the employee for the sub-shift, responsive to the assigned pay category.

36. A computer data signal embodied in a carrier wave for allowing users to calculate an employee's compensation, comprising:

program code for associating sets of attributes with pay categories; program code for splitting the employee's shifts into sub-shifts, responsive to work parameters;

program code for associating a set of attributes for a sub-shift; and program code for determining compensation for the employee for the sub-shift, responsive to pay categories associated with the set of attributes associated with the sub-shift.

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